

SYNCHRONIZATION DEVICE OF LOCKING RING TYPE

Abstract

Method and arrangement for providing a synchronization device that is provided in a range gear assembly within planetary gearing in a vehicle. During synchronization and gear changing, at least one spring suspension element (28, 34, 46) transmits bearing force from the clutch sleeve to the synchronization ring by means of cooperation with first recesses (32, 33, 47, 48) in the clutch sleeve (18). The clutch sleeve, clutch rings, synchronization ring and spring suspension elements are provided on one side of the ring gear (14). The synchronization ring (24, 45) is constructed together with an additional mirror-inverted synchronization ring in order to form a double synchronization ring (24, 45). The clutch sleeve (18), during its axial movement for engagement of gear, separates the friction surfaces (23, 36, 26, 37) in the synchronization device to the gear, which becomes disengaged by means of the fact that at least one second recess (42, 43, 49) is provided on the double synchronization ring (45) and that a spring suspension element (46) cooperates with the second recess

(42, 43, 49) as well.